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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,685	08/30/2001	Terry Loughrin	6039-000293	1262

27572 7590 09/02/2004

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EXAMINER

DUNWOODY, AARON M

ART UNIT PAPER NUMBER

3679

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/943,685

Applicant(s)

LOUGHRIN ET AL.

Examiner

Aaron M Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

The drawings were received on 6/17/2004. These drawings are approved.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

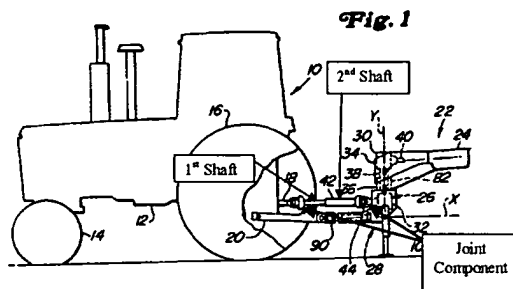
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5706901, Walters et al in view of US patent 4551115, Ferguson.

In regards to claim 1, in Figure 1 below, Walters et al discloses a drive shaft assembly (42) for interconnecting a driving component (10) of an agricultural machine and a driven component (22) of an agricultural implement, comprising a first shaft; a second shaft engaging the first shaft for enabling torque transmission and enabling relative axial sliding motion therebetween; and a joint component of a universal joint operably interconnecting one of the first and second shafts to one of the agricultural driving and driven components, the joint component is both rotatable through a specified range of rotation and is fixed from axial movement relative to one of the second shaft, the agricultural driving component of the agricultural machine and the agricultural driven component of the agricultural implement. Walters et al does not disclose the joint component being rotatable through a specified range of free-motion rotation without torque

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transmission. Ferguson teaches joint component (see Figure 1 and 3) being rotatable through a specified range of free-motion without torque transmission "to provide a driveshaft coupling of concise configuration capable of damping vibrations" (col. 1, lines 46-50). As Ferguson relates to automobile driveshafts, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a joint component rotatable through a specified range of free-motion without torque transmission to provide a driveshaft coupling of concise configuration capable of damping vibrations, as taught by Ferguson.



In regards to claim 2, Ferguson discloses the joint component including axial grooves and the second shaft includes an end portion having radially extending axial teeth for engaging the grooves and thereby enabling the specified range of relative rotation.

In regards to claim 3, Ferguson discloses the grooves being formed within a bore of the joint component and the teeth extend outward from the end portion, whereby the end portion is received into the bore for enabling engagement between the teeth and the grooves.

In regards to claim 4, Ferguson discloses the grooves being formed in an outer circumferential surface of the joint component and the teeth extend radially

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inward from the end portion, whereby the joint component is partially received into the end portion for enabling engagement between the teeth and the grooves.

In regards to claims 5 and 9, Ferguson discloses a ring engaging with a groove of one of the joint component and the second shaft for fixing the joint component and the second shaft from relative axial motion therebetween.

In regards to claim 6, Ferguson discloses the joint component including axial grooves and one of the driving and driven components includes radially extending axial teeth for engaging the grooves and thereby enabling the specified range of relative rotation.

In regards to claim 7, Ferguson discloses the grooves being formed within a bore of the joint component and the teeth extend radially outward from one of the driven and driving components, whereby one of the driven and driving components is received into the bore for enabling engagement between the teeth and the grooves.

In regards to claim 8, Ferguson discloses the grooves being formed along a stub end of the joint component and the teeth extend radially inward within a bore of one of the driven and driving components, whereby the stub end is partially received into the bore for enabling engagement between the teeth and the grooves.

In regards to claim 10, Ferguson discloses the joint component being a universal joint yoke.

In regards to claim 11, Ferguson discloses the second shaft including a stub end interconnected thereto for operably interconnecting the joint component and the second shaft.

### ***Response to Arguments***

Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is 703-306-3436. The examiner can normally be reached on 7:30 am - 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P Stodola can be reached on 703-306-5771. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**ERIC K. NICHOLSON**  
**PRIMARY EXAMINER**